

Fig. 1B.

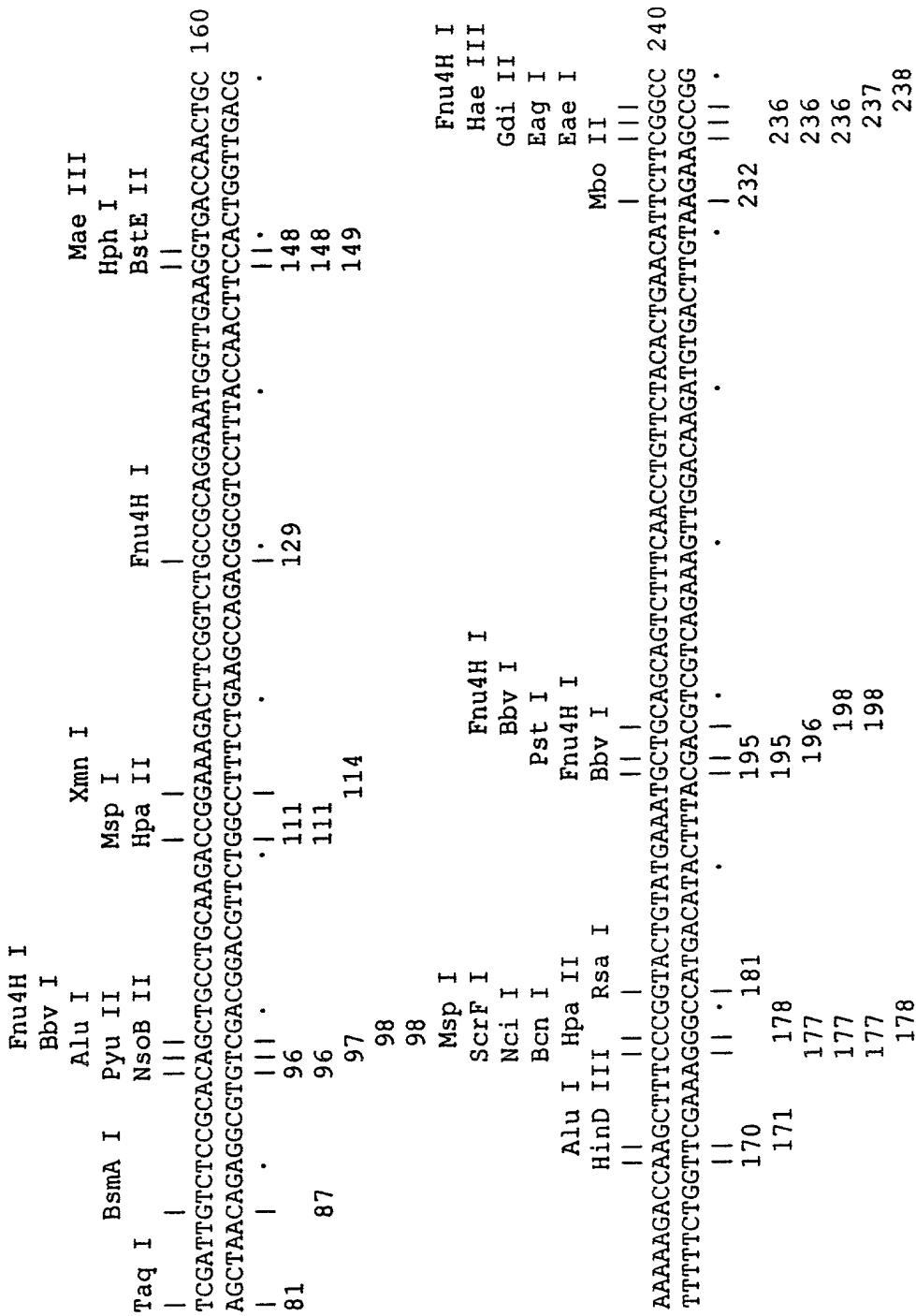
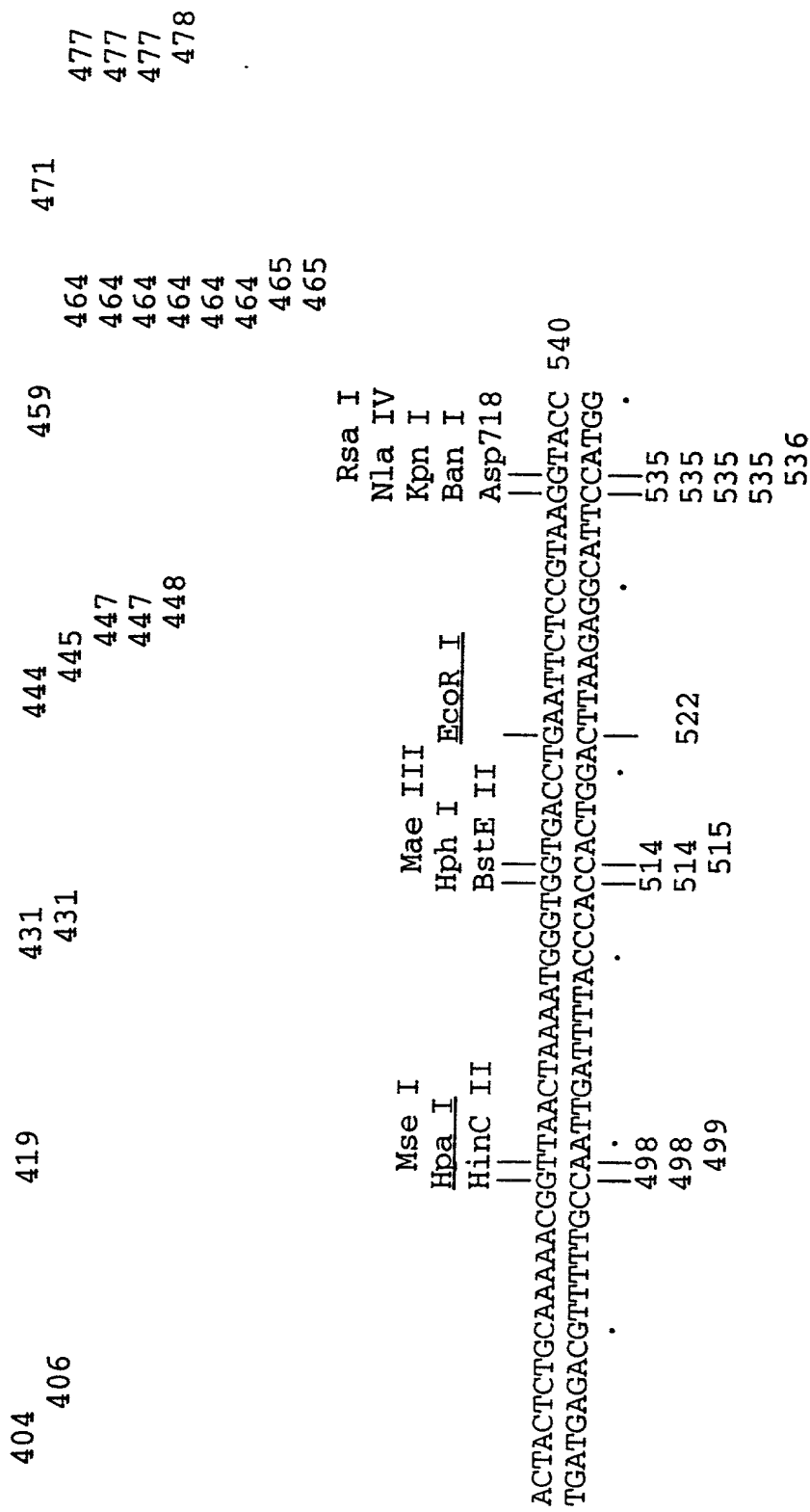


Fig. 1E



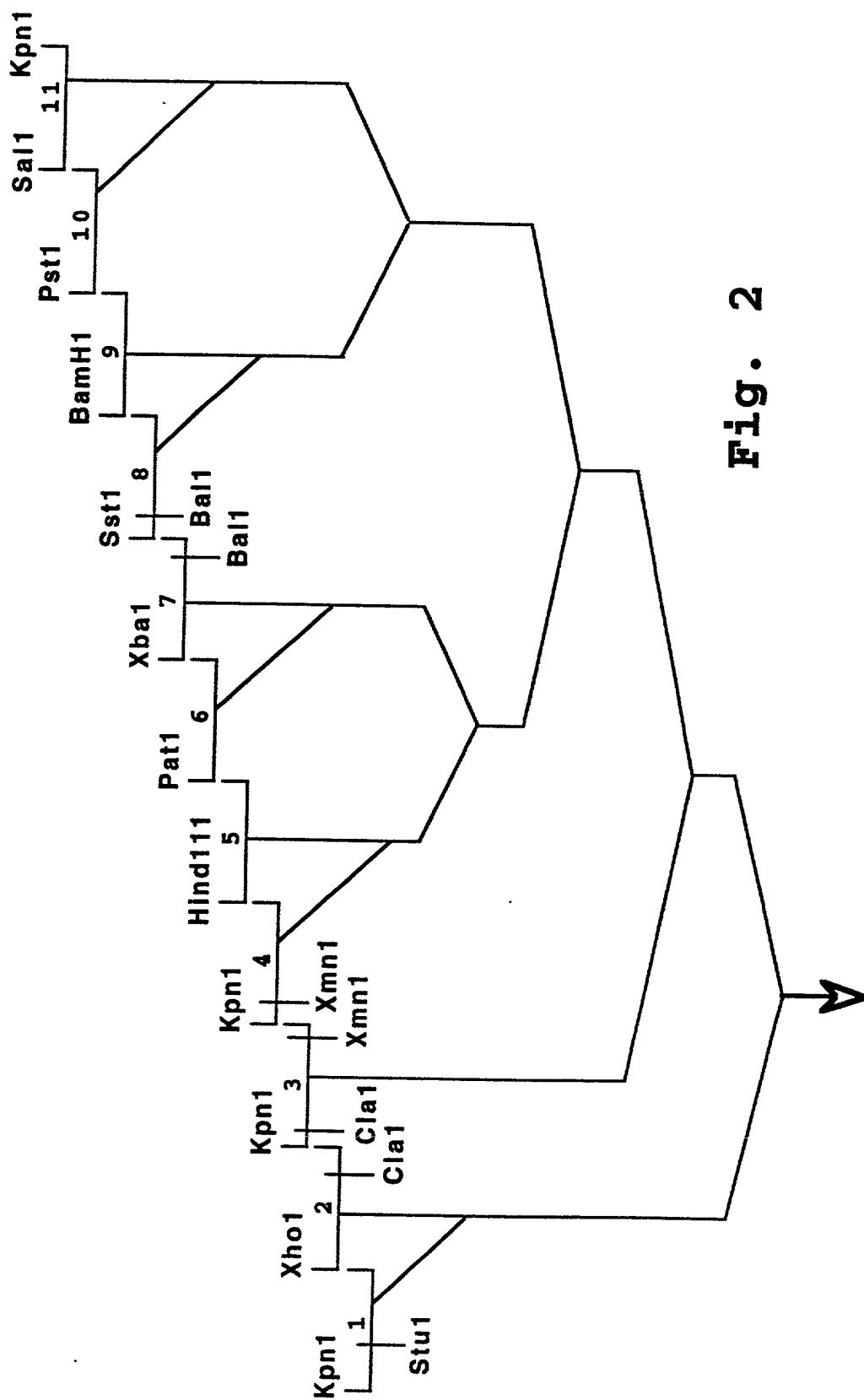


Fig. 2

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                                -23                                -9
                                met ala phe val leu ser leu leu met ala leu val leu val ser
oIFNt      cccc ATG GCC TTC GTG CTC TCT CTA CTG ATG GCC CTG GTG CTG GTC AGC
htIFN      cccc ATG GCC TTC GTG CTC TCT CTA CTC ATG GCC CTG GTG CTG GTC AGC

-8                                -1  +1                                11
tyr gly pro gly gly ser leu gly cys tyr leu ser arg lys leu met leu asp ala
TAT GGC CCA GGA GGA TCT CTG GGT TGT TAC CTA TCT CGG AAA CTC ATG CTG GAT GCC
TAC GGC CCA GGA GGA TCC CTG GGT TGT GAC CTG TCT CAG AAC CAC GTG CTG GTT GGC

12                                20                                30
arg glu asn leu lys leu leu asp arg met asn arg leu ser pro his ser cys leu
AGG GAG AAC CTC AAG CTC CTG GAC CGA ATG AAC AGA CTC TCC CCT CAT TCC TGT CTG
AGG AAG AAC CTC AGG CTC CTG GAC GAA ATG AGG AGA CTC TCC CCT CGC TTT TGT CTG

31                                40                                49
gln asp arg lys asp phe gly leu pro gln glu met val glu gly asp gln leu gln
CAG GAC AGA AAA GAC TTT GGT CTT CCC CAG GAG ATG GTG GAG GGC GAC CAG CTC CAG
CAG GAC AGA AAA GAC TTC GCT TTA CCC CAG GAA ATG GTG GAG GGC GGC CAG CTC CAG

50                                60                                68
lys asp gln ala phe pro val leu tyr glu met leu gln gln ser phe asn leu phe
AAG GAC CAG GCC TTC CCT GTG CTC TAC GAG ATG CTC CAG CAG AGC TTC AAC CTC TTC
GAG GCC CAG GCC ATC TCT GTG CTC CAT GAG ATG CTC CAG CAG AGC TTC AAC CTC TTC

69  70                                80                                87
tyr thr glu his ser ser ala ala try asp thr thr leu leu glu gln leu cys thr
TAC ACA GAG CAC TCC TCT GCT GCC TGG GAC ACC ACC CTC CTG GAG CAG CTC TGC ACT
CAC ACA GAG CAC TCC TCT GCT GCC TGG GAC ACC ACC CTC CTG GAG CAG CTC CGC ACT

88  90                                100                                106
gly leu gln gln gln leu asp his leu asp thr cys arg gly gln val met gly glu
GGA CTC CAA CAG CAG CTG GAC CAC CTG GAC ACC TGC AGG GGT CAA GTG ATG GGA GAG
GGA CTC CAT CAG CAG CTG GAC AAC CTG GAT GCC TGC CTG GGG CAG GTG ATG GGA GAG

107  110                                120                                125
glu asp ser glu leu gly asn met asp pro ile val thr val lys lys tyr phe gln
GAA GAC TCT GAA CTG GGT AAC ATG GAC CCC ATT GTG ACC GTG AAG AAG TAC TTC CAG
GAA GAC TCT GCC CTG GGA AGG ACG GGC CCC ACC CTG GCT CTG AAG AGG TAC TTC CAG

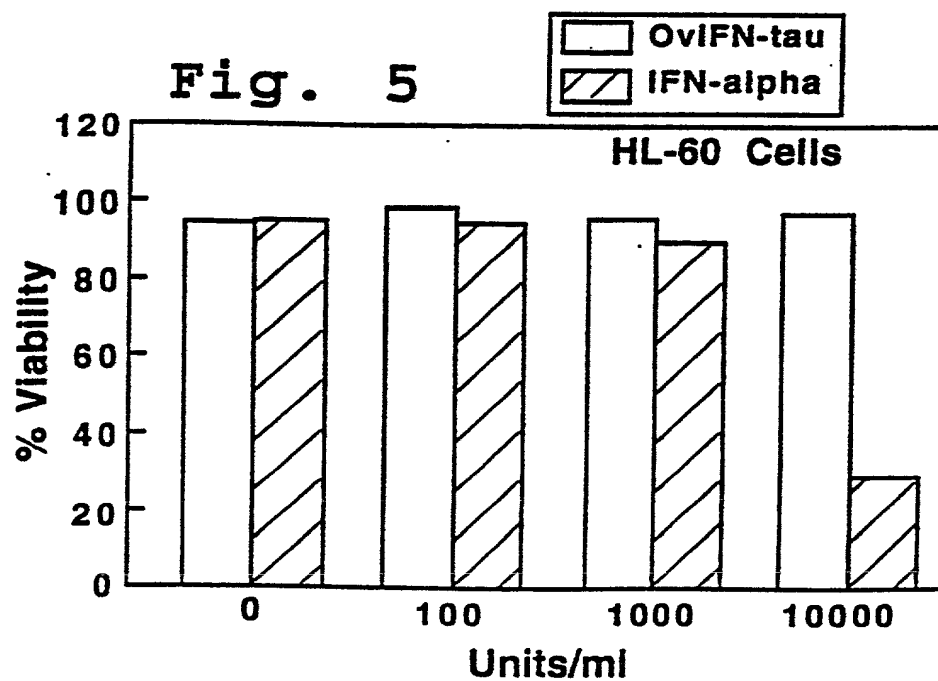
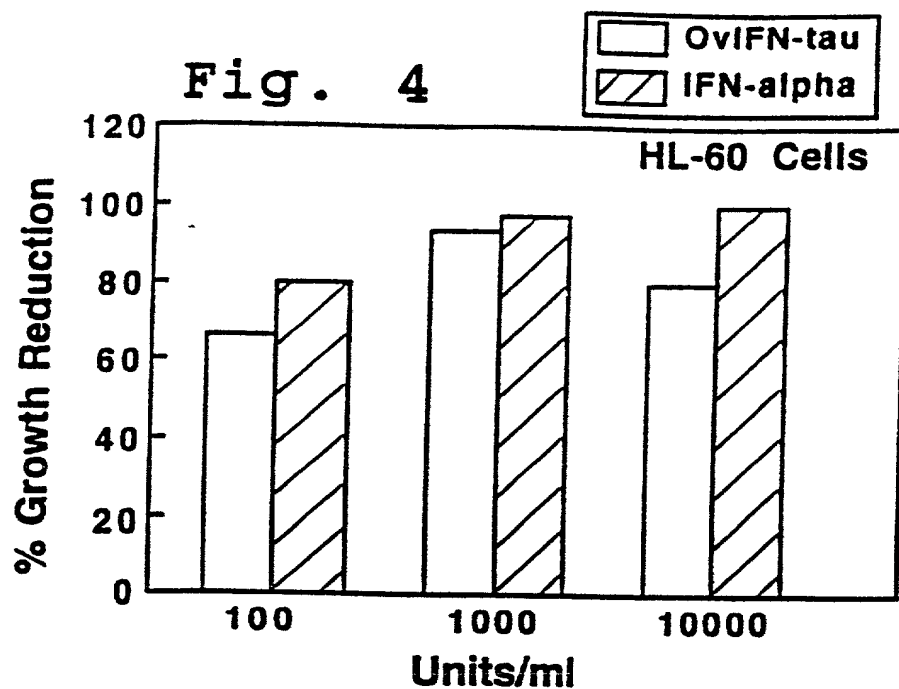
126  130                                140                                144
gly ile tyr asp tyr leu gln glu lys gly tyr ser asp cys ala trp glu ile val
GGC ATC TAT GAC TAC CTG CAA GAG AAG GGA TAC AGC GAC TGC GCC TGG GAA ATC GTC
GGC ATC CAT GTC TAC CTG AAA GAG AAG GGA TAC AGC GAC TGC GCC TGG GAA ACC GTC

145  150                                160                                163
arg val glu met met arg ala leu thr val ser thr thr leu gln lys arg leu thr
AGA GTC GAG ATG ATG AGA GCC CTC ACT GTA TCA ACC ACC TTG CAA AAA AGG TTA ACA
AGA CTG GAA ATC ATG AGA TCC TTC TCT TCA TTA ATC AGC TTG CAA GAA AGG TTA AGA

164  172
lys met gly gly asp leu asn ser pro end
AAG ATG GGT GGA GAT CTG AAC TCA CCT TGA
ATG ATG GAT GGA GAC CTG AGC TCA CCT TGA

```

Fig. 3



Peptides	MW	HI*	Sequence
IFN(1-37) (SEQ ID NO:5)	4465	-0.78	CYSLRKLMLDARENKLLDRMNRRLSPHSCLDQRKDFG
IFN(34-64) (SEQ ID NO:6)	3610	-0.72	KDFGLPQEMVEGDQLQKDQAFVLYEMLQQS
IFN(62-92) (SEQ ID NO:7)	3586	-0.53	QQSFNLFYTEHSSAAWDTTLLLEQLCTGLQQQ
IFN(90-122) (SEQ ID NO:8)	3712	-0.86	QQQLDHLDTCRGQVMGEEDSELGNMDPIVTVKK
IFN(119-150) (SEQ ID NO:9)	3948	-0.56	TVKKYFQGIYDYLQEKGYSDCAWEIVRVEMMR
IFN(139-172) (SEQ ID NO:10)	3818	-0.11	CAWEIVRVEMMRALTSTTLQKRLTKMGDDLNSP

*Hydropathic Index

Fig. 6

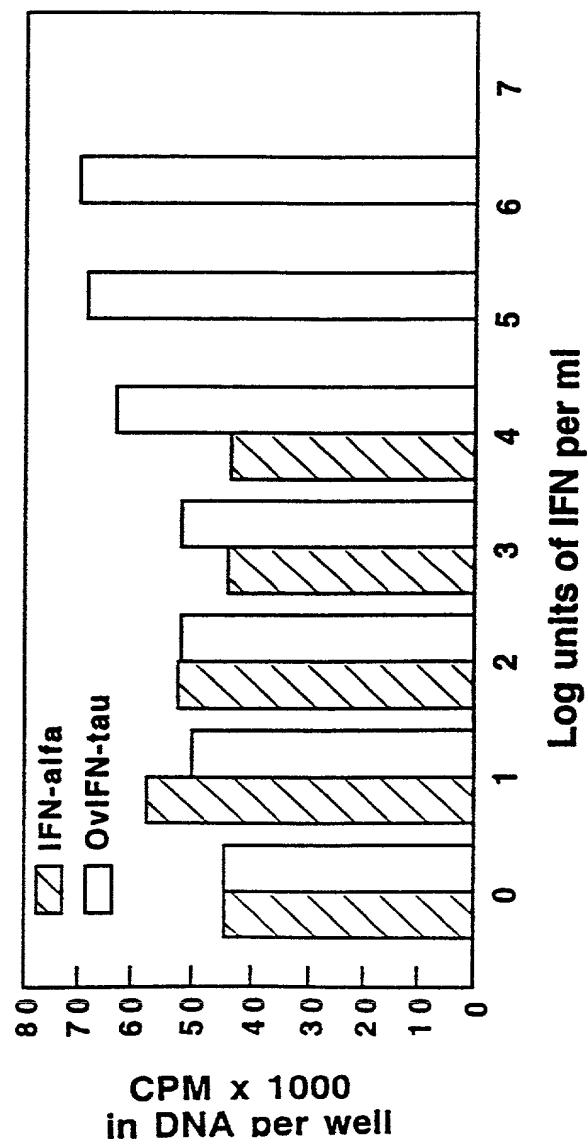


Fig. 8

1 80
CTGAGATGGGATCAGAGAACCTACCTGAAGGTTCCCCCTGACCCCATCTCAGCCAGCCCAGCAGCAGCCGCATCTTCCCC

81 140
ATG GCC TTC GTG CTC TCT CTA CTG ATG GCC CTG GTG CTG GTC AGC TAT GGC CCA GGA GGA
S1 S20
Met Ala Phe Val Leu Ser Leu Leu Met Ala Leu Val Leu Val Ser Tyr Gly Pro Gly Gly
141 200
TCT CTG GGT TGT TAC CTA TCT CGG AAA CTC ATG CTG GAT GCC AGG GAG AAC CTC AAG CTC
S21 17
Ser Leu Gly Cys Tyr Leu Ser Arg Lys Leu Met Leu Asp Ala Arg Glu Asn Leu Lys Leu
201 260
CTG GAC CGA ATG AAC AGA CTC TCC CCT CAT TCC TGT CTG CAG GAC AGA AAA GAC TTT GGT
18 37
Leu Asp Arg Met Asn Arg Leu Ser Pro His Ser Cys Leu Gln Asp Arg Lys Asp Phe Gly
261 320
CTT CCC CAG GAG ATG GTG GAG GGC GAC CAG CTC CAG AAG GAC CAG GCC TTC CCT GTG CTC
38 57
Leu Pro Gln Glu Met Val Glu Gly Asp Gln Leu Gln Lys Asp Gln Ala Phe Pro Val Leu
321 380
TAC GAG ATG CTC CAG CAG AGC TTC AAC CTC TTC TAC ACA GAG CAC TCC TCT GCT GCC TGG
58 77
Tyr Glu Met Leu Gln Gln Ser Phe Asn Leu Phe Tyr Thr Glu His Ser Ser Ala Ala Trp
381 440
GAC ACC ACC CTC CTG GAG CAG CTC TGC ACT GGA CTC CAA CAG CAG CTG GAC CAC CTG GAC
78 97
Asp Thr Thr Leu Leu Glu Gln Leu Cys Thr Gly Leu Gln Gln Gln Leu Asp His Leu Asp
441 500
ACC TGC AGG GGT CAA GTG ATG GGA GAG GAA GAC TCT GAA CTG GGT AAC ATG GAC CCC ATT
98 117
Thr Cys Arg Gly Gln Val Met Gly Glu Glu Asp Ser Glu Leu Gly Asn Met Asp Pro Ile
501 560
GTG ACC GTG AAG AAG TAC TTC CAG GGC ATC TAT GAC TAC CTG CAA GAG AAG GGA TAC AGC
118 137
Val Thr Val Lys Lys Tyr Phe Gln Gly Ile Tyr Asp Try Leu Gln Gln Lys Gly Tyr Ser
561 620
GAC TGC GCC TGG GAA ATC GTC AGA GTC GAG ATG ATG AGA GCC CTC ACT GTA TCA ACC ACC
138 157
Asp Cys Ala Trp Glu Ile Val Arg Val Glu Met Met Arg Ala Leu Thr Val Ser Thr Thr
621 666
TTG CAA AAA AGG TTA ACA AAG ATG GGT GGA GAT CTG AAC TCA CCT TGATGACTCTTGCCGACTA
158 172
Leu Gln Lys Arg Leu Thr Lys Met Gly Gly Asp Leu Asn Ser Pro

764
AGATGCCACATCAGCCTCCTACACCCGCTGTGTTTCATTTTCTGCTCCAGCCACCAAATTCATTG

844
AATTACTTTAGCTGATACTTTGTCTAGTAGTAAAAAGCAAGTAGATATAAAAGTATTCAGCTGTAGGGGCATGAGTCCTGA

924
AATGATGCCTTCCCTGATGTTATCTGTTGCTGATTTATTTATACCTTCTAGCATTTAACATACTTAAAAATATTAGGAAAT

972
TTGTTAAGTTACATTTACATCTGTACATCATATTAAAAATTTCTAAAAACAAAAA

Fig. 7

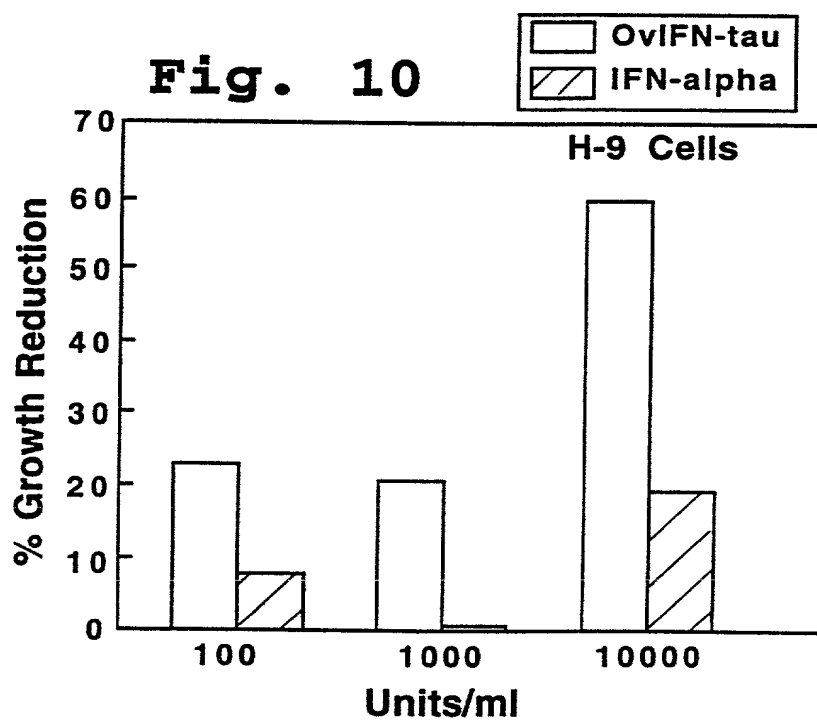
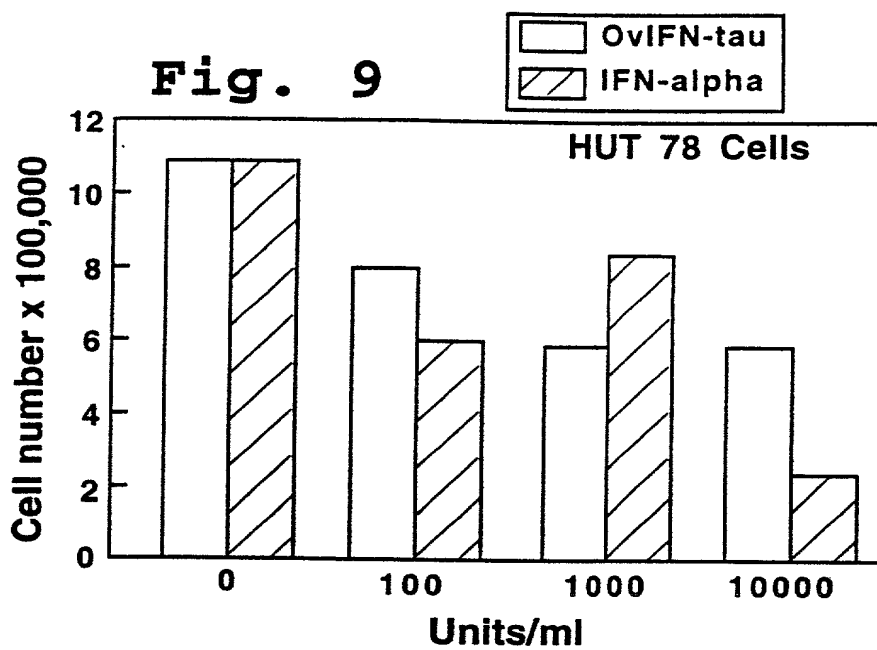


Fig. 11A

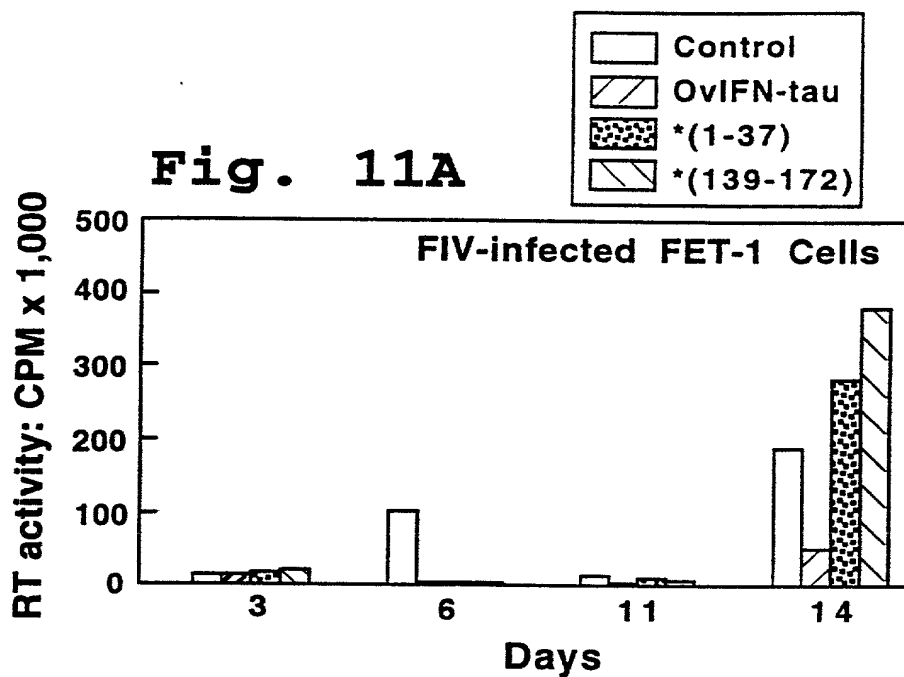
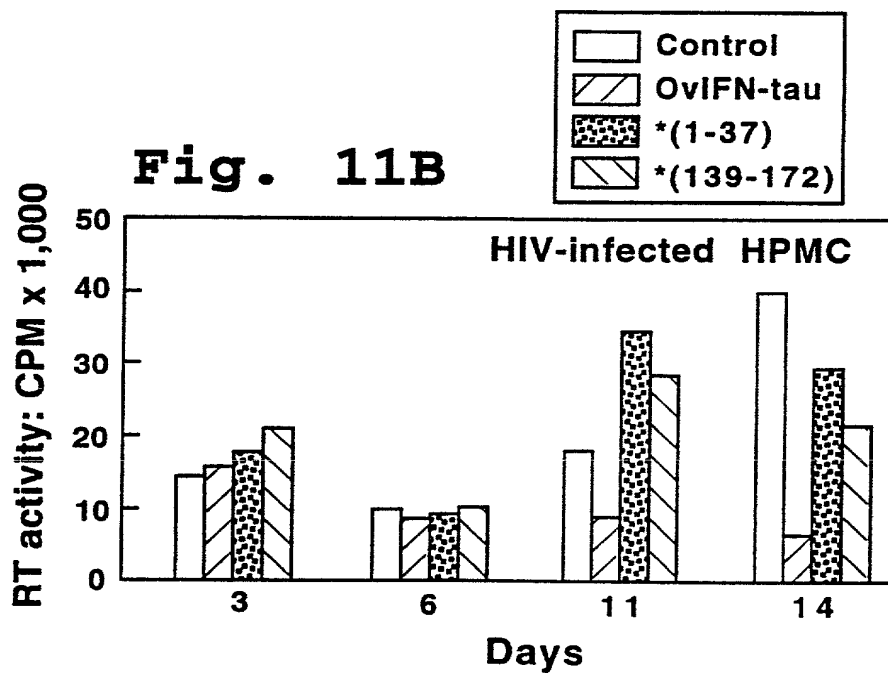


Fig. 11B



000007 61654260

Fig. 12

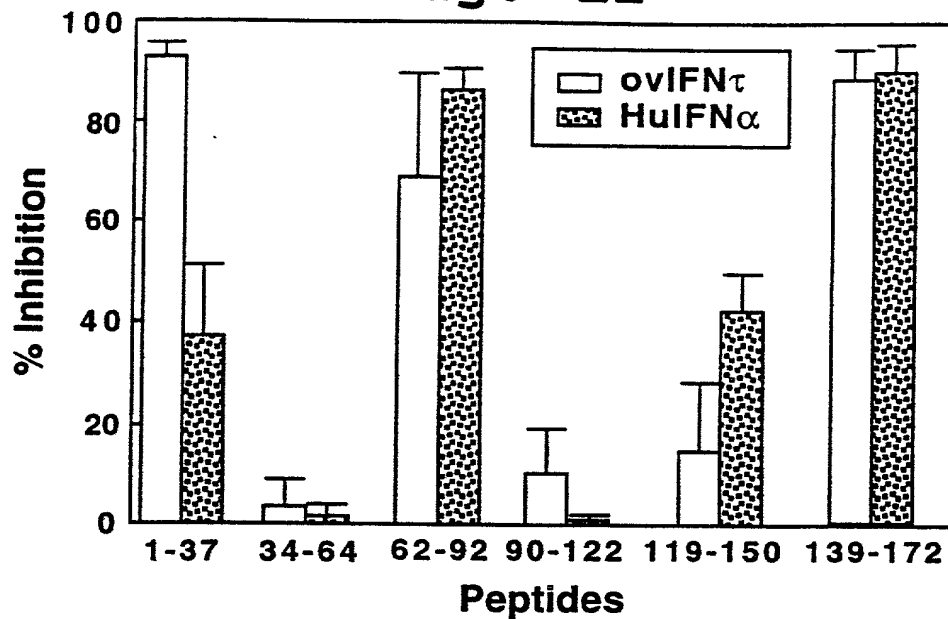


Fig. 13

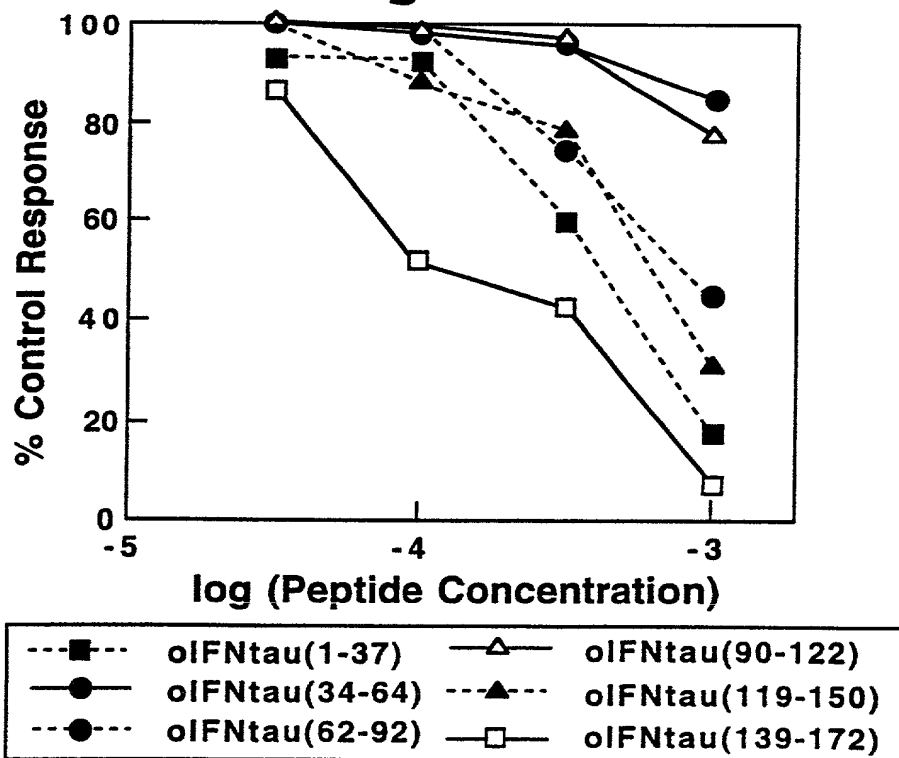


Fig. 14

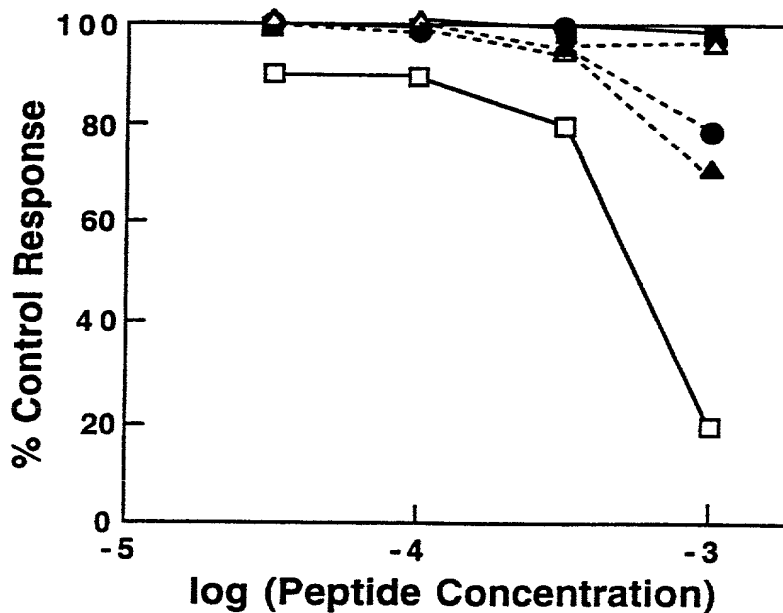
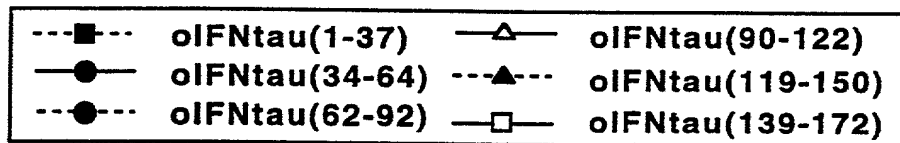
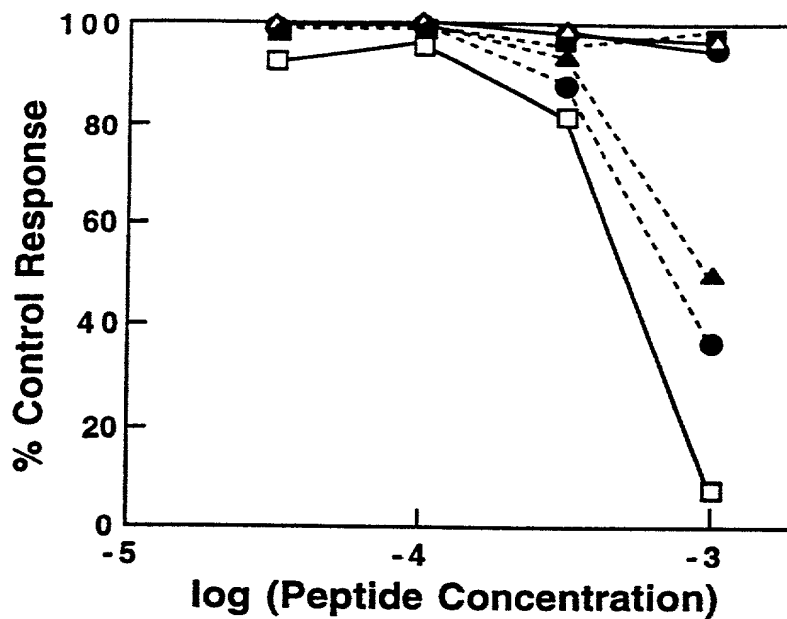


Fig. 15

000001-07034260

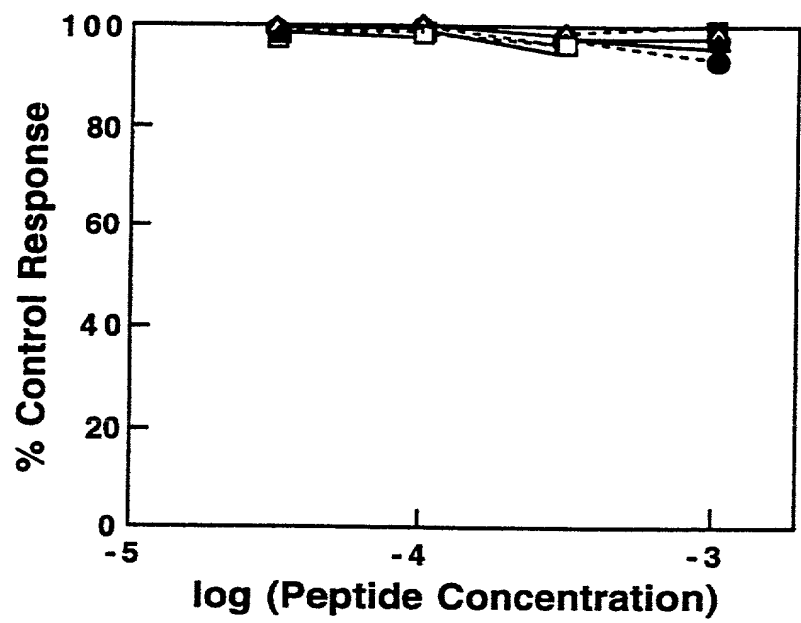
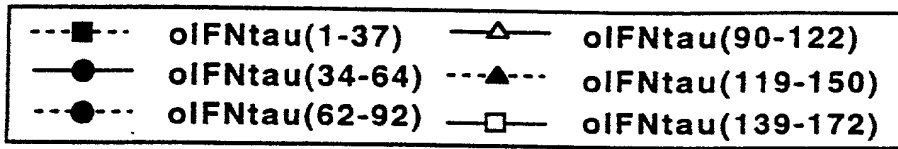


Fig. 16

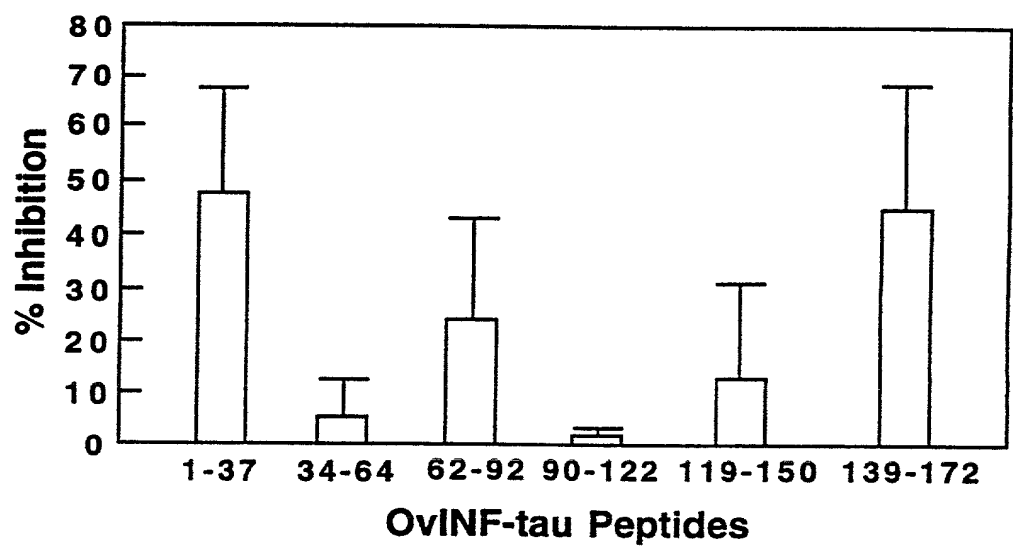


Fig. 17

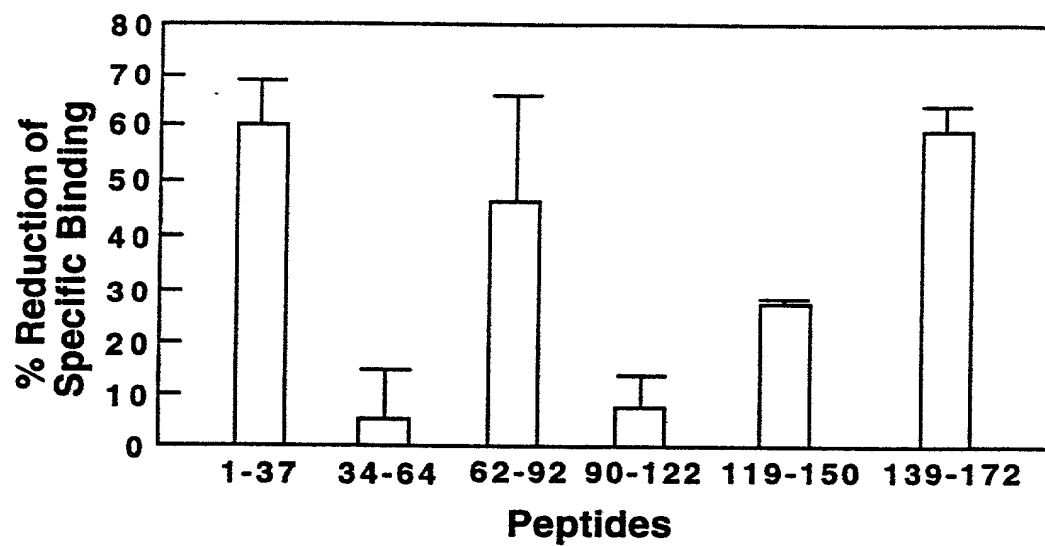


Fig. 18


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-23
Met ala phe val leu ser leu leu met ala leu val leu val ser
oINFt cccc ATG GCC TTC GTG CTC TCT CTA CTG ATG GCC CTG GTG CTG GTC AGC
LEXY.5 cccc c
TOSHI.9 cc c
TOSHI.10 cc c

-8 -1 +1
tyr gly pro gly gly ser leu gly cys tyr leu ser arg lys leu met leu asp ala
TAT GGC CCA GGA GGA TCT CTG GGT TGT TAC CTA TCT CGG AAA CTC ATG CTG GAT GCC
c c c G g A C A G T G
c c c (---)G g A C A G T G
c g c C G G g A C A G T G

12 20 30
arg glu asn leu lys leu leu asp arg met asn arg leu ser pro his ser cys leu
AGG GAG AAC CTC AAG CTC CTG GAC CGA ATG AAC AGA CTC TCC CCT CAT TCC TGT CTG
A G GA GG GC TT
A G A GG GC TT
C C G G A GG T GC T

31 40 49
gln asp arg lys asp phe gly leu pro gln glu met val glu gly asp gln leu gln
CAG GAC AGA AAA GAC TTT GGT CTT CCC CAG GAG ATG GTG GAG GGC GAC CAG CTC CAG
c C t a a G
c C t a TAG a G
c C t a t G
Clone 21 ! t G
Clone 35 ! t G
Clone 15 ! G
Clone 18 ! T AG T

50 60 68
lys asp gln ala phe pro val leu tyr glu met leu gln gln ser phe asn leu phe
AAG GAC CAG GCC TTC CCT GTG CTC TAC GAG ATG CTC CAG CAG AGC TTC AAC CTC TTC
G C A T C T
G C A T C T
G C A T C
G C A T C
G C A T C
G C A T C A
G C A T T C T

69 80 87
tyr thr glu his ser ser ala ala try asp thr thr leu leu glu gln leu cys thr
TAC ACA GAG CAC TCC TCT GCT GCC TGG GAC ACC ACC CTC CTG GAG CAG CTC TGC ACT
C
C
C
C
C
C
A G t CT

```

Fig. 19A

88	90											100					106
gly	leu	gln	gln	leu	asp	his	leu	asp	thr	cys	arg	gly	gln	val	met	gly	glu
GGA	CTC	CAA	CAG	CTG	GAC	CAC	CTG	GAC	ACC	TGC	AGG	GGT	CAA	GTG	ATG	GGA	GAG
	T					A			t G		CT	g	g				
	T					A			t G		CT	g	g				
	T					t G			t G		CT	g	g		C		
	T					t G			t G		CT	g	g		C		
	T					t G			t G		CT	g	g		C		
	T					t G			G		CT	g	g		C		
	T					t G			t G	t CT	g	g	T	CT			

107	110											120					125
glu	asp	ser	glu	leu	gly	asn	met	asp	pro	ile	val	thr	val	lys	lys	tyr	phe
GAA	GAC	TCT	GAA	CTG	GGT	AAC	ATG	GAC	CCC	ATT	GTG	ACC	GTG	AAG	AAG	TAC	TTC
			CC		a	GG	C	G			CC	C	G	T	C		
			CC		a	GG	C	G			CC	C	G	T	C		
			CC		a	GA	C	G			CC	C	G	A		G	t
			CC		a	GG	C	G			CC	C	G	A		C	t
			CC		a	GG	C	G			CC	C	G	A		C	t
			CC		a	GG	C	G			CC	C	G			GC	
			CC		a	GG	C	G			CC	C	G			GC	

126		130										140				144
gly	ile	tyr	asp	tyr	leu	gln	glu	lys	gly	tyr	ser	asp	cys	ala	trp	glu
GGC	ATC	TAT	GAC	TAC	CTG	CAA	GAG	AAG	GGA	TAC	AGC	GAC	TGC	GCC	TGG	GAA
	C	T				A										C
	C	T				A										C
	C	T				A			t	t						t
	C	T				A			t	t						
	C	T				A			t	!						
	C	AT														
	C	T							!							

145				150									160		163
arg	val	glu	met	met	arg	ala	leu	thr	val	ser	thr	thr	leu	gln	lys
AGA	GTC	GAG	ATG	ATG	AGA	GCC	CTC	ACT	GTA	TCA	ACC	ACC	TTG	CAA	AAA
	C	G	a	C		T	T	T	TC	T	T	G			G
	g	a	C			T	T	T	TC	T	T	G			G
	C	G	a	C		T	t	g	T			G		C	G

164				172
lys	met	gly	gly	asp
AAG	ATG	GGT	GGA	GAT
	T	A	c	G
	T	A	c	G
	T	A	c	G

Fig. 19B

```

-23                               -9
oTP-1      Met ala phe val leu ser leu leu met ala leu val leu val ser
LEXY.5
TOSHI.9
TOSHI.10

-8                                -1 +1                                11
tyr gly pro gly gly ser leu gly cys tyr leu ser arg lys leu met leu asp ala
                                   asp          gln asn his val    val gly
                                   (---)asp       gln asn his val    val gly
                                   arg           asp       gln asn his val    val gly

12                                20                                30
arg glu asn leu lys leu leu asp arg met asn arg leu ser pro his ser cys leu
   lys            arg          glu        arg          arg phe
   lys            arg          gln        arg          arg phe
ser gln          arg          gly gln     arg          leu arg phe

31                                40                                49
gln asp arg lys asp phe gly leu pro gln glu met val glu gly asp gln leu gln
                              ala                gly
                              ala                gly
                              ala                gly
Clone 21                      !                        gly
Clone 35                      !                        gly
Clone 15                      !                        gly
Clone 18                      !                       val ser      phe

50                                60                                68
lys asp gln ala phe pro val leu tyr glu met leu gln gln ser phe asn leu phe
glu ala             ile ser         his
glu ala             ile ser         his
glu ala             ile ser         his
glu ala             ile ser         his
glu ala             ile ser         his
glu ala             ile ser         his lys
glu ala             ile ser         his

69                                80                                87
tyr thr glu his ser ser ala ala try asp thr thr leu leu glu gln leu cys thr
his                                                                arg
his                                                                arg
his                                                                arg
his                                                                arg
his                                                                arg
his          arg                                                  arg
his lys      arg                                                  leu

```

Fig. 20A

[illegible]

Fig. 20B

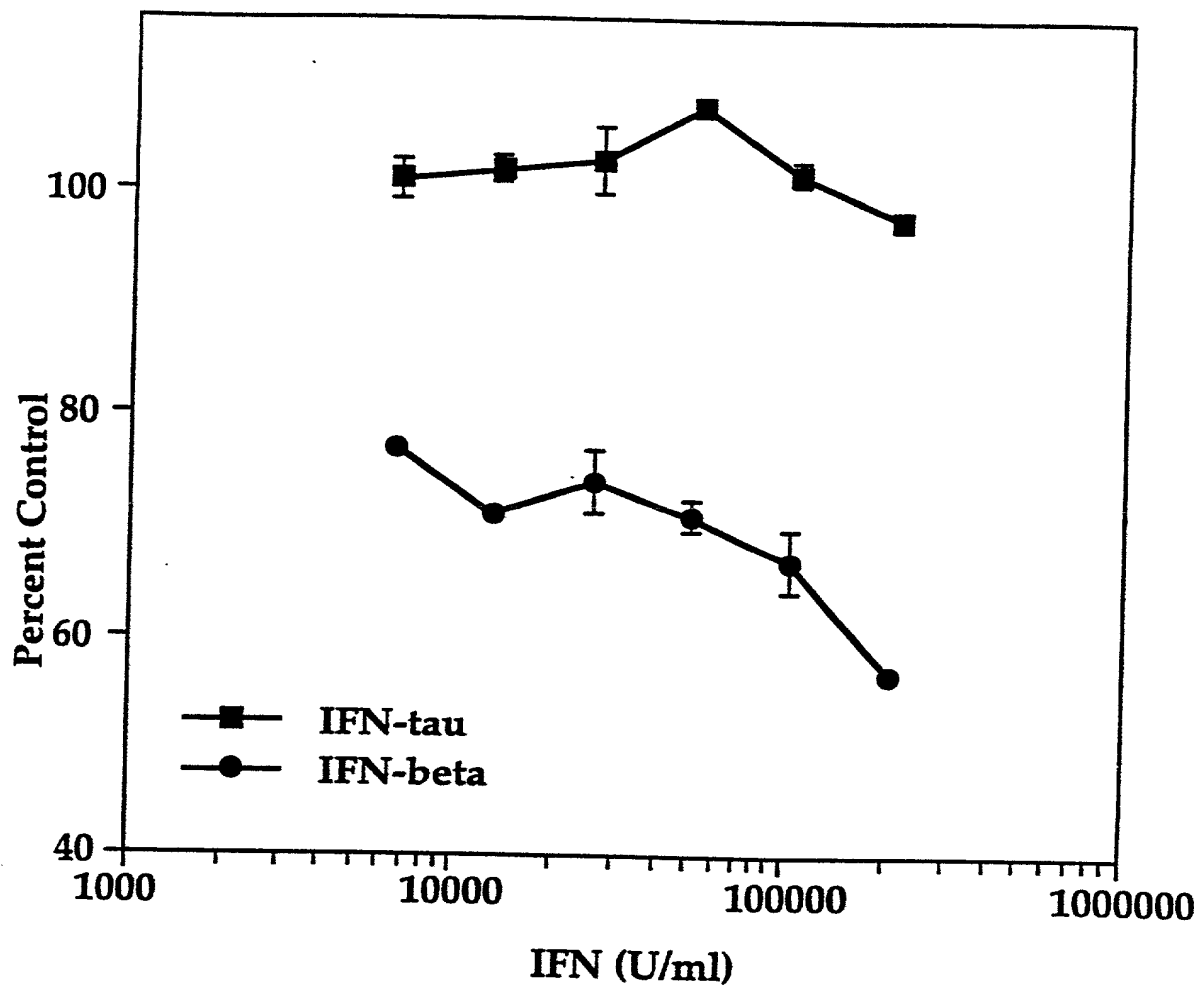


Fig. 21